18.04 Preparing a Statement of Cash Flows

The CPA exam will periodically require candidates to prepare a statement of cash flows. The problem will generally provide:

- A comparative balance sheet with beginning and ending balances and a column showing the increase or decrease in the individual accounts
- A summarized income statement
- Additional information about specific transactions

These problems can best be solved when a systematic approach is applied. The following approach can be used to solve any such CPA exam problem and will enable you to complete the problem easily within the time allotted and provide the maximum points.

The procedures to be followed are:

1. Set up the statement of cash flows in a 3-column format.
   - The 1st column will be for increases, the 2nd for decreases, and the 3rd for the net change to an item.
   - Leave ample space for each category of cash flows, with operating activities generally having the most transactions.
   - If the problem calls for the use of the direct method and a supplementary schedule reconciling net income to cash flows, set up the supplementary schedule using a similar 3-column format.
   - At the bottom of the statement, fill in the amounts for the net increase or decrease in cash and the beginning and ending balances of cash.
2. Set up T-accounts for each balance sheet account, other than cash.
   - The increase or decrease can be placed on the appropriate debit or credit side of the T-account.
   - Leave room above the increase or decrease to enter transactions
3. Analyze the additional information provided, preparing journal entries for the transactions. Post the debits and credits in the appropriate schedules.

   Begin with net income. Put the amount in the increase column of the operating activities section of the statement of cash flows. If the direct method is used, enter it in the increase column of the supplementary schedule. In either case indicate that it is "Net income". In addition, enter the same amount on the credit side of the retained earnings T-account.

   For all additional entries:

   - Entries to balance sheet accounts other than cash will go into the T-accounts
   - Debits or credits to cash will go into the appropriate section of the statement with debits in the increase column and credits in the decrease column.

- Debits or credits to income statement accounts will go into the operating activities section of the statement. If the problem calls for the direct method, these entries will go into the supplementary schedule instead.

4. Any unreconciled differences in the balance sheet T-accounts should be eliminated with the offsetting debit or credit going into the appropriate section of the statement of cash flows.
5. If the problem calls for the direct method, complete the operating activities section of the statement by using the income statement and the related balance sheet accounts. In all cases, complete the statement with subtotals for each section.

Class Example

The comparative balance sheet for Ruiz Corporation at December 31, 20X1 and 20X0 is as follows:

Ruiz Corporation
Comparative Balance Sheet
December 31, 20X1 and 20X0 (000's omitted)

	20X1	**20X0**	**Increase (Decrease)**
Assets			
Cash	$ 550	$ 430	$ 120
Short-term investments	400	100	300
A/R, net	100	100	--
Inventory	540	460	80
Long-term investments	1,500	1,600	(100)
Plant assets	4,100	3,400	700
Accumulated Dep	(1,200)	(1,200)	--
Total Assets	$5,990	$4,890	$1,100
Liabilities & S/E			
A/P	$ 170	$ 175	$ (5)
Dividends payable	400	240	160
Short-term bank debt	325	--	325
Long-term debt	510	400	110
C/S, $10 par	700	600	100
APIC	820	700	120
R/E	3,065	2,775	290
Total Liabilities & S/E	$5,990	$4,890	$1,100

The following additional information is available:

- Net income was $790.
- A long-term investment was sold for $135. There were no other transactions affecting long-term investments. All investments are classified as available-for-sale securities.
- Cash dividends of $500 were declared.
- Building costing $600 and having a carrying amount of $350 was sold for $350.
- Equipment costing $110 was acquired through issuance of long-term debt.

- 10,000 shares of common stock were issued for $22 a share.

Required:

Prepare a statement of cash flows using the indirect method. Do not prepare schedules for supplementary disclosures.

Class Solution

The quickest way to solve the problem is to prepare the journal entries that must have taken place during the year to explain the changes in all the accounts, then post to the statement of cash flows those debits and credits that involve income statement accounts to the operating activities section (O), entries to cash associated with asset acquisitions and disposals in the investing activities section (I), and entries to cash associated with creditor and shareholder transactions in the financing activities section (F). In the journal entries below, each item that would be posted to the statement of cash flows is identified by section in parentheses. The entries that are most obvious are those based on the additional information.

1. To report net income of $790, the entry is:

Net income (O)	790	
Retained earnings		790

2. The long-term investment sold for $135 must have had a cost of $100 based on the decrease in the investment account, so the entry is:

Cash (I)	135	
Gain on sale of investment (O)		35
Long-term investments		100

3. The declaration of $500 in dividends is recorded as follows:

Retained earnings	500	
Dividends payable		500

4. The sale for $350 of the building that cost $600 and has a carrying value of $350 is reported as follows:

Cash (I)	350	
A/D	250	
Plant assets		600

5. The acquisition of $110 of equipment by issuing long-term debt is as follows:

Plant assets	110	
Long-term debt		110

6. The issuance of 10,000 shares of stock at $22 per share is recorded as follows:

Cash (F)	220	
CS, par $10		100
APIC		120

At this point, more entries are needed since the changes in several of the accounts have not yet been explained. Look at each account on the balance sheet that hasn't yet been explained by the previous six entries and prepare the most logical entry to explain the change.

7. The short-term investments increased by $300, presumably by purchase. The likely entry is:

Short-term investments	300	
Cash (I)		300

Accounts receivable didn't change, so no entry is needed.

8. Inventory increased by $80 during the year. This is probably the result of many entries for purchases and sales and isn't easy to determine. Using the indirect method, however, it is only necessary to identify the net change in inventory as an adjustment to cost of sales in the operating section, so the entry is as follows:

Inventory	80	
Increase in inventory (O)		80

The decrease in long-term investments of $100 was already explained with entry (5) above.

9. Plant assets already were reduced in entry (3) by $600 and increase in entry (4) by $110, for a net decrease of $490. Since, however, plant assets ended the year $700 higher than they began, there must have been purchases totaling $1,190 that weren't identified previously, (1,190 – 600 + 110 = 700). The likely entry is:

Plant assets	1,190	
Cash (I)		1,190

10. Accumulated depreciation didn't change during the year, but entry (4) required a decrease of $250 when the building was sold, so there must have been an increase of $250 not yet identified. Clearly, this is from the normal depreciation entry:

Depreciation expense (O)	250	
A/D		250

11. The decrease in accounts payable is the result of multiple transactions and under the indirect method can simply be assumed to be an adjustment to cost of goods sold in the operating section:

Accounts payable	5	
Decrease in accounts payable (O)		5

12. Dividends payable increased $500 when dividends were declared in entry (2), but the net change for the year was an increase of only $160, so there must have been a decrease of $340 resulting from dividends payments (500 – 340 = 160):

Dividends payable	340	
Cash (F)		340

13. The only reason for short-term debt to increase by $325 is borrowing:

Cash (F)	325	
Short-term bank debt		325

The increase of $110 in long-term debt was explained by entry (4) already. The increases in common stock and APIC were explained by entry (6). The increase of $290 in retained earnings was explained by entries (1) and (2) (790 – 500 = 290).

Now that all the accounts have been explained, all necessary entries must have been prepared. The resulting statement of cash flows is:

Ruiz Corporation
Statement of Cash Flows
December 31, 20X1

DESCRIPTION	DEBITS	CREDITS	NET CHANGE
OPERATING ACTIVITIES			
Net income	790 (1)		
Gain on sale of investment		35 (2)	
Increase in inventory		80 (8)	
Depreciation expense	250 (10)		
Decrease in accounts payable		5 (11)	
Net from operating activities	**1,040**	**120**	**920**
INVESTING ACTIVITIES			
Proceeds from building sale	350 (4)		
Proceeds from sale of investment	135 (2)		
Cost of short-term investments		300 (7)	
Payments for plant asset purchase		1,190 (9)	
Net from investing activities	**485**	**1,490**	**(1,005)**
FINANCING ACTIVITIES			
Proceeds from stock issuance	220 (6)		
Dividends paid		340 (12)	
Proceeds of short-term bank loan	325 (13)		
Net from financing activities	**545**	**340**	**205**
Increase in cash			**120**
Cash at beginning of year			430
Cash at end of year			550